



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,881	08/20/2001	Juha Salokannel	460-010510-US(PAR)	6759
2512	7590	07/06/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			HASHEM, LISA	
			ART UNIT	PAPER NUMBER
			2645	
DATE MAILED: 07/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/932,881	SALOKANNEL ET AL.	
	Examiner	Art Unit	
	Lisa Hashem	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 August 2001.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-10 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 20 August 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/1-25-2002.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. Claims 1-10 are pending in this office action.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 4, is attached to the instant office action.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "AC1 and AC2" and "APC1 and APC2" have been used to designate access point controller 1 and access point controller 2, respectively, in Figure 1a and on page 7, line 13. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without

underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).
"Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 7, and 10 recite the limitation "the power consumption" in pages 13 and 14.

There is insufficient antecedent basis for this limitation in these claims.

7. Claim 3 recites the limitation "the resource requirement" in page 13. There is insufficient antecedent basis for this limitation in the claim.

8. Claims 5 and 8 recite the limitation "the reception" in pages 13 and 14. There is insufficient antecedent basis for this limitation in these claims.

9. Claim 6 recites the limitation "the HIPERLAN/2 system" in page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by European Patent Application No. 0650279 by Baptist et al, hereinafter Baptist.

Regarding claim 1, Baptist discloses a method for reducing power consumption of a wireless terminal or mobile station (Figure 1, 24) communicating with an access point (transmits and receives data; serves as the point of interconnection between the wireless LAN and a fixed wire network) (Figure 1, 16; column 1, lines 37-40; column 2, lines 30-38), in which method the wireless terminal is set to dormancy or SLEEP state (column 3, lines 47-51), an in-operation message is inherently transmitted at intervals from the wireless terminal to the access point, wherein an awake timer (Figure 3, 78) resets each time a message is detected from said terminal, and for sending the in-operation message, the wireless terminal is set in an active state or AWAKE-1 state (column 4, line 39 – column 5, line 25), characterized in that in the method, the wireless terminal is returned to dormancy substantially immediately after the transmission of the in-operation message (column 3, lines 31-42).

Regarding claim 2, the method according to claim 1, wherein Baptist further discloses characterized in that the in-operation message used is a message to which no acknowledgement message is transmitted from the access point, wherein the wireless terminal may have moved out of reach of the access point and is in a dead spot and the in-operation message could not be delivered to said access point (column 5, lines 19-23; see Figure 1).

Regarding claim 3, the method according to claim 1, wherein Baptist further discloses characterized in that the in-operation message used is a resource request (RR), in which the resource requirement is set as a value for which no resource allocation is performed for the wireless terminal, wherein the mobile station sends a response message to a watchdog message that it is still operative (column 5, line 39 – column 6, line 5).

Regarding claim 4, the method according to claim 1, wherein Baptist further discloses characterized in that the in-operation message used is a message to which an acknowledgement message is transmitted from the access point, and that the wireless terminal leaves said acknowledgement message unreceived, wherein the wireless terminal may have moved out of reach of the access point and is in a dead spot (column 5, lines 19-23; see Figure 1).

Regarding claim 5, the method according to claim 1, wherein Baptist further discloses characterized in that in connection with the setting to dormancy, a maximum transmission interval is selected for the in-operation messages, wherein the wireless terminal shifts to the active state for transmitting the in-operation message before the selected maximum interval has expired from the transmission of the previous in-operation message, and that the reception of in-operation messages is monitored at the access point within the maximum interval (column 3, lines 32-42; column 5, lines 5-29).

Regarding claim 7, please see the rejection of the method in claim 1 to reject the communication system in claim 10.

Regarding claim 8, the communication system according to claim 7, wherein Baptist further discloses characterized in that it comprises means for selecting a maximum transmission interval for the in-operation messages in connection with the setting to dormancy, wherein the wireless terminal comprises means for setting to the active state for transmitting the in-operation message before the selected maximum interval has expired from the transmission of the previous in-operation message, and that the access point comprises means for monitoring a reception of in-operation messages within the maximum interval (column 3, lines 32-42; column 5, lines 5-29).

Regarding claim 10, please see the rejection of the method in claim 1 to reject the wireless terminal in claim 10.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application No. 0650279 by Baptist as applied to claims 1 and 7, respectively, above, and further in view of U.S. Patent No. 6,693,915 by Lappetelainen et al, hereinafter Lappetelainen.

Regarding claim 6, the method according to any of the claim 1, wherein Baptist further discloses characterized in that a wired, cable-based LAN system is used in data transmission between the access point and the wireless terminal (column 2, lines 30-36).

Baptist does not disclose a HIPERLAN/2 system.

Lappetelainen discloses a wireless data transmission system that comprises a wireless terminal communicating with an access point (see Abstract), wherein the system is a HIPERLAN/2 system (column 1, lines 43-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Baptist to include a HIPERLAN/2 system as taught by Lappetelainen to provide a radio data transmission system for a local area network. One of ordinary skill in the art would have been lead to make such a modification since a HIPERLAN/2 system provides a data transmission rate that aims to reach the order of 25 Mbit/s when the maximum connection distance is some tens of meters. This is suitable to be used within the same building for example, as an internal local area network for a single office.

Regarding claim 9, please see the rejection of the method in claim 6 to reject the communication system in claim 9.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- European Patent Application No. 0907262 by Romans disclose a mobile station that has an active mode in which it receives and transmits messages and a sleep mode which incurs reduced power consumption

Art Unit: 2645

15. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for formal communications intended for entry)

Or call:

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (703) 305-4302. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LH
lh

June 24, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

